

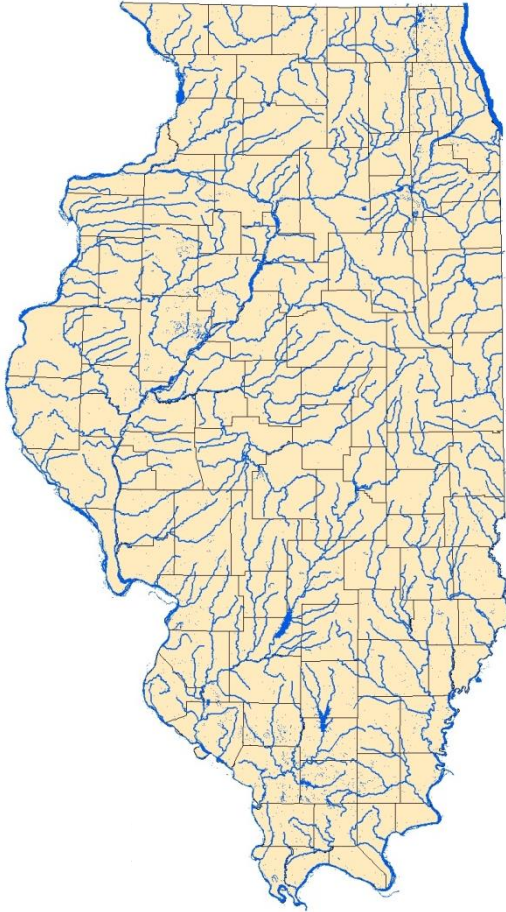
Infrastructure Grants Workshop



Tuesday Aug. 18, 2015
Bartlett

Flooding in Illinois

Illinois' Rivers, Lakes, & Streams



- Illinois has the nation's largest inland system of rivers, lakes, and streams
- There has been a federally declared flood disaster in every county in Illinois
- Over 5,000 buyouts completed in the State thus far

Disasters 1993-2014



**Throughout our
history...**

**Plenty of
frustrated
Illinoisans!**



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Photo courtesy of Rockford Register Star



Panic



Flooding



Devastation



Concern



**Recovery &
Reconstruction**



Flood Amnesia

The Hydro ILLOGICAL Cycle

Illinois' Flood Damage Reduction Efforts Overview



- 1. Improving Floodplain Mapping**
- 2. Enforcing Floodplain Regulations**
- 3. Promoting Flood Insurance**
- 4. Supporting Mitigation**
- 5. Implementing Structural Measures**

Quality Checking Plain Boundary Compliance

2. Floodplain Regulations



State of Illinois permits required for:

- *Floodway development**
- *Dams**
- *Public Water uses**
- *LOMCs**

Regulated Floodway Construction Activities

- Illinois has regulated floodway development for nearly 100 years.
- Over 1,000+ permits reviewed per year.



State Floodway Regulations in the Chicago Metro Area

Open space uses only in the floodway. No buildings!

State review and approval of LOMCs. LOMCs required.

Stormwater regulations

Compensatory storage required.

Countywide ordinances.



3. National Flood Insurance Program (NFIP)

820 NFIP Communities
(#5 in the nation).

49,110 flood insurance policies
(#16 in the nation).

4,897 repetitive loss structures
(#18 in the nation).



**Claims have
dropped every year
since the 1993
flood.**



CRS in Illinois

- Ranked #6 in the nation for Participation
- 16 communities are class 6 and 11 are a class 5
- Only four communities in the nation with a higher CRS rating
- 40% of all flood insurance policies in Illinois are subject to CRS discounts

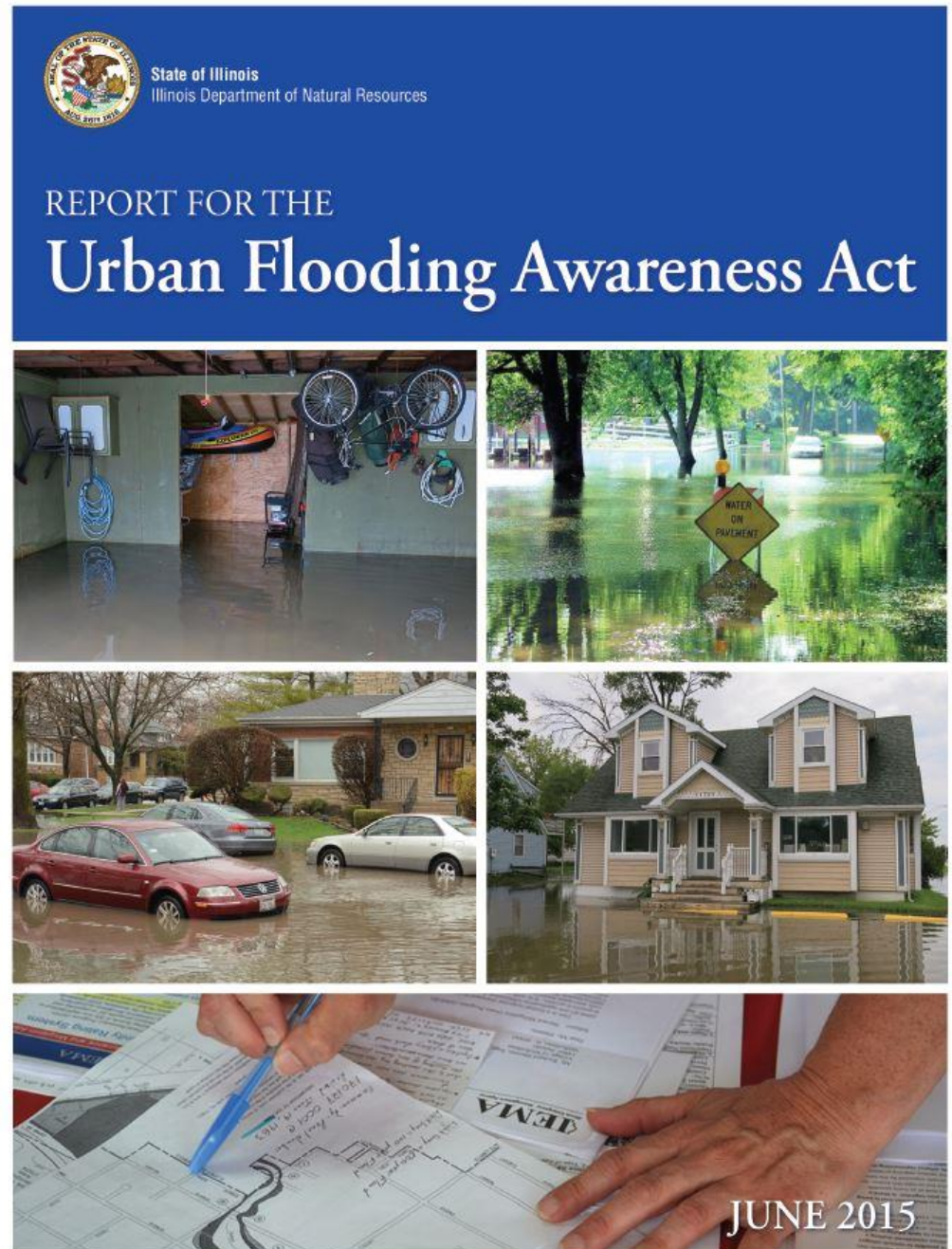
The Illinois Plan....

Focus on Non-structural solutions

- Inventory Repetitive Loss Properties
 - 60% of Rep Loss have already been mitigated.
 - Annual savings of \$2.4 million (based on existing claims history)
- Nearly 5,000 buyouts since 1993
- State provides 25% match on most projects.



1. Prevalence and cost with urban flooding.
2. Climate change on urban flooding
3. Impact of county stormwater programs on urban flooding
4. Evaluation of policies such as using the 100yr storm.
5. Review of technology to evaluate property damage risk.
6. Strategies for minimizing property damage from urban flooding.
7. The consistency of criteria for state funding flood control projects.
8. Strategies for increasing NFIP and community rating system.
9. Strategies to increase the availability, affordability of flood insurance and basement back-up insurance.



4. Structural Flood Control



Urban Areas = Difficult Solutions

- Channel modifications
- Floodwalls
- Levees
- Pump stations
- Land acquisitions or flood easements
- Detention/retention basins
- Wetlands restoration



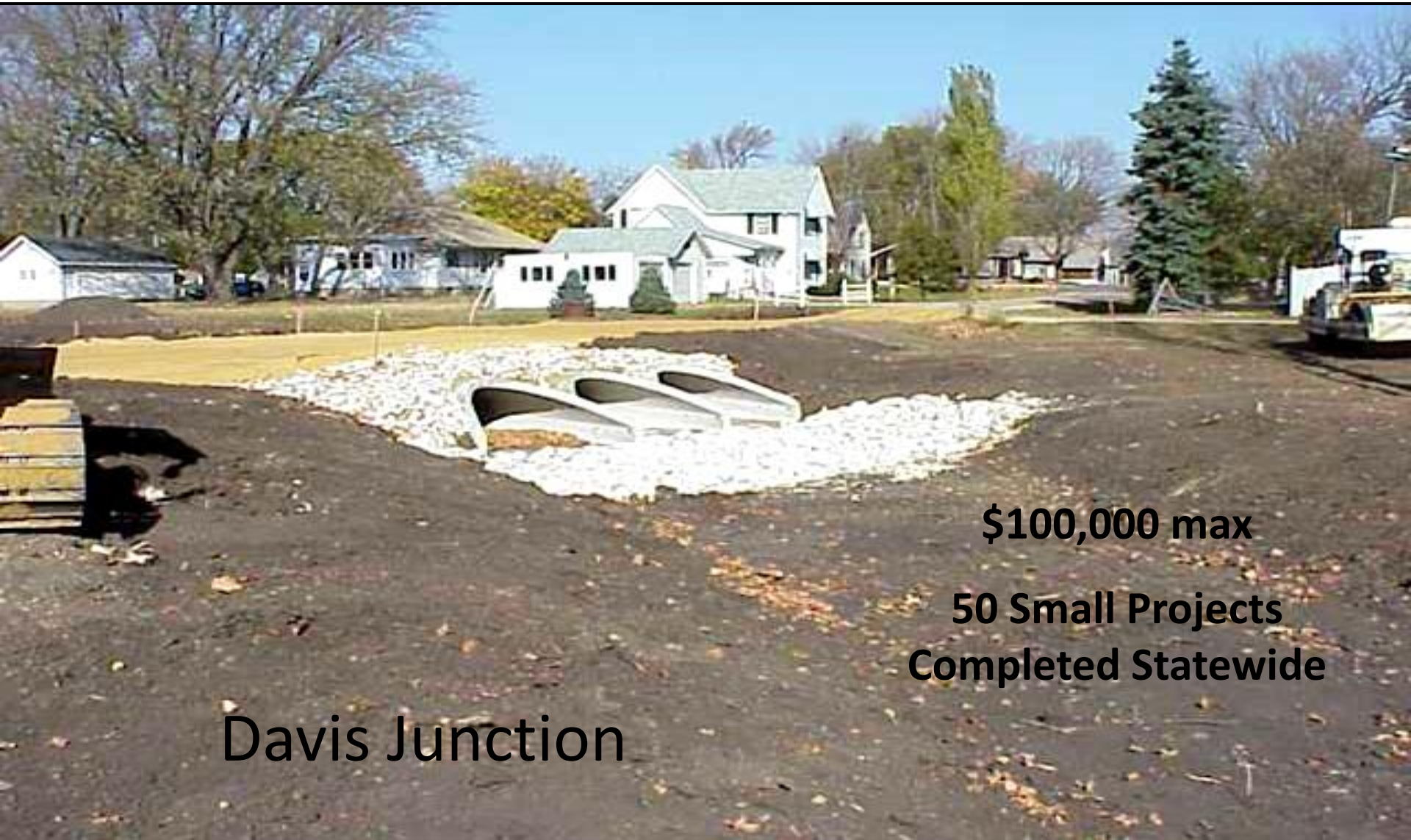
Rand Park Floodwall and Levee (Des Plaines Area)



Hickory Hills Reservoir



Small Projects Structural Flood Control



\$100,000 max

**50 Small Projects
Completed Statewide**

Davis Junction

Flood Gages and Monitoring

- **Monitor Stages on all Illinois streams**
- **Manage IDNR gages and cost share with USGS operated gages**
- **Monitor Precipitation throughout the watershed**
- **Forecast floods**
- **Coordinate with Emergency Managers**



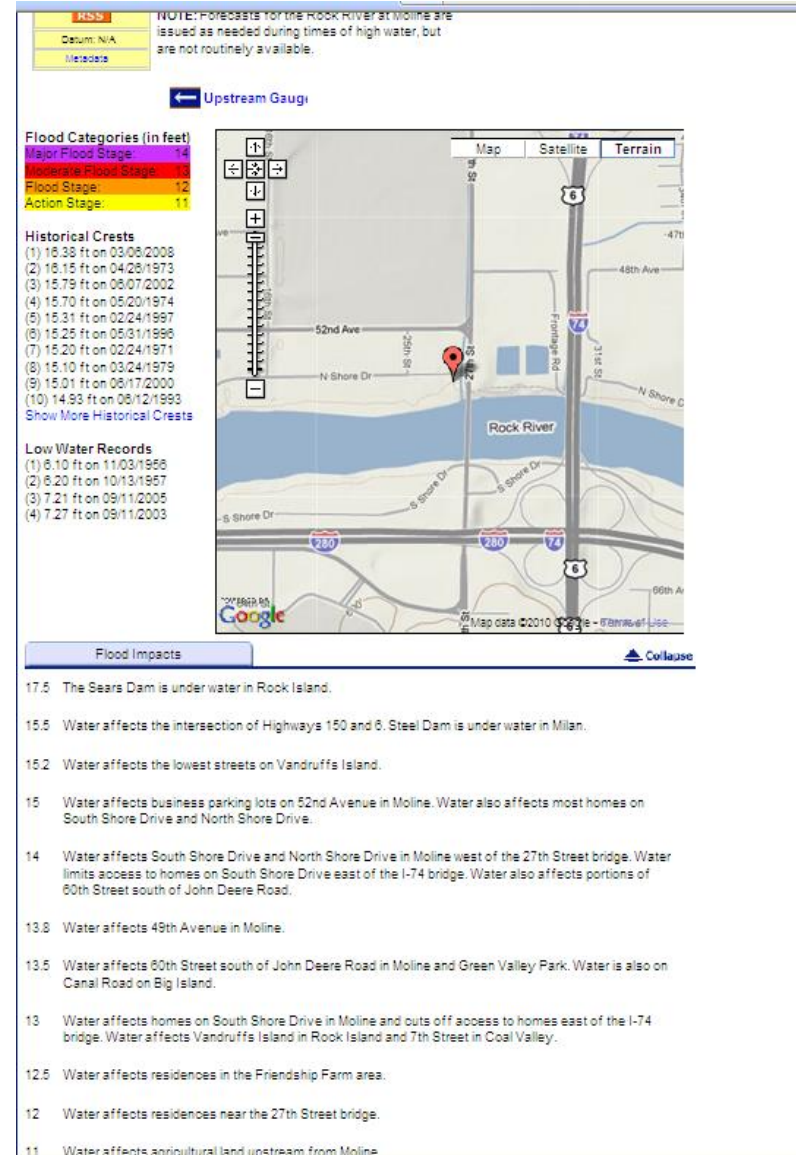
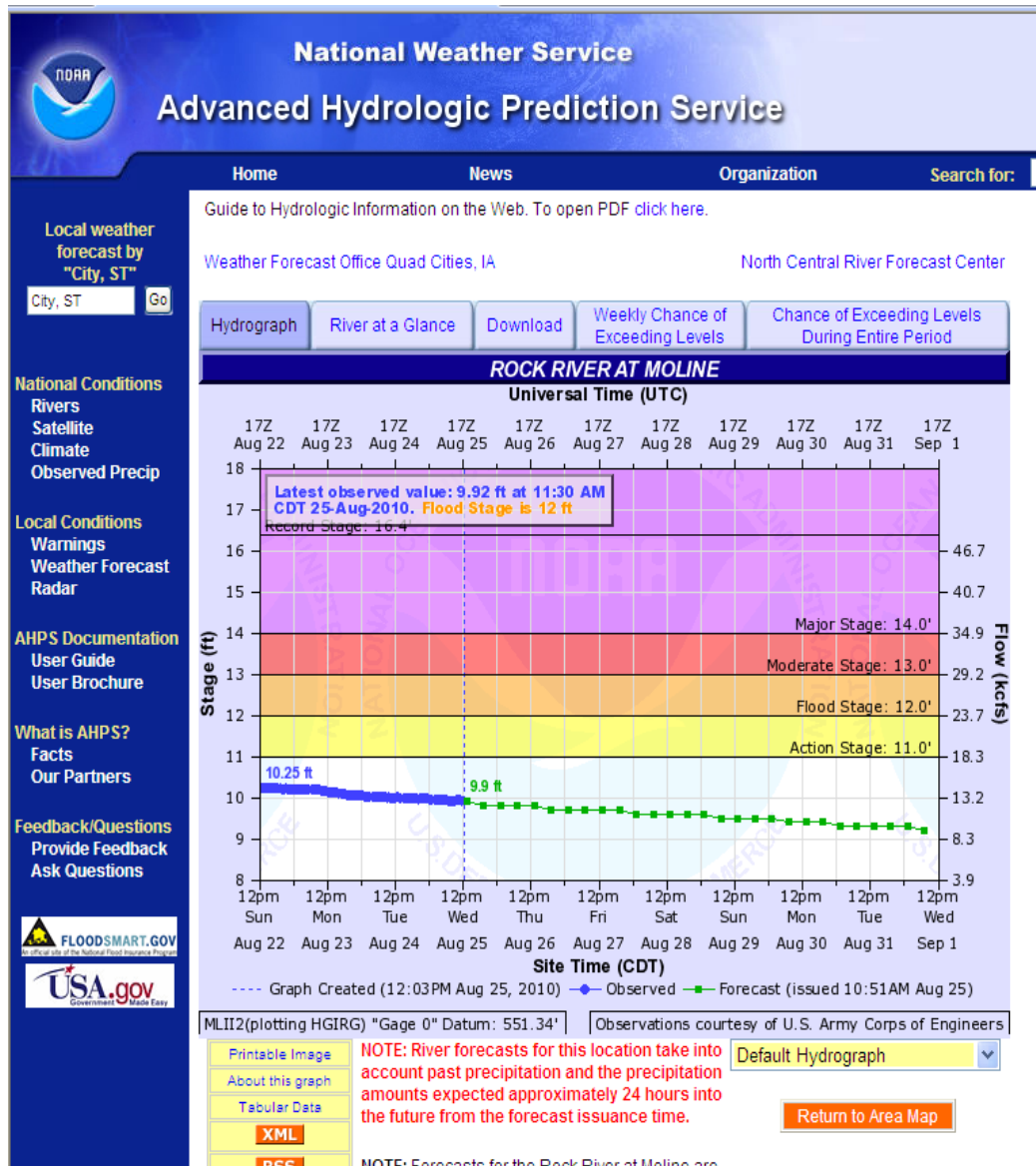
Flood Forecasting

Data Collection



- USGS gage network support
- OWR project gage network
- High Water Marks
- Precipitation gages
- Survey data

Flood Forecasting





IAFSM

*Illinois Association for
Floodplain and Stormwater Management*

- Nation's first state flood association
 - founded in 1986
 - 600 members
- IAFSM Current newsletter
 - Printed quarterly
- Workshops and twilight seminars
 - 6+ per year



- Certified Flood Managers
 - Approximately 530
- Publications
 - Annual conference
 - 700 attendees
 - Chicago in even years
 - Downstate in odd years



THE IAFSM CURRENT

Illinois Association for
Floodplain and Stormwater Management

Fall 2009 Newsletter

Adams County's GIS Fights Floods and Saves Residents Money -Joyce Dell, Adams County Highway Department

Adams County is located along the Mississippi River in west central Illinois with a population of 68,277 and over 125 square miles of floodplain. Their award-winning Geographic Information System (GIS) has a wealth of information available to the public. The GIS includes floodplain information that was recently used to fight 2008's floods and to provide post-flooding assistance to residents.

Background

The Adams County GIS is a multi-participant effort that began in 1992 and is now used on a daily basis throughout the County. Cooperation has been the focal point of this GIS with an extensive and varied membership including Adams County, the City of Quincy, and five major entities. The Adams County Highway Department is the custodian of the GIS.

Data sharing is a priority for Adams County. In the same consideration of cooperation that the Adams County GIS had been conceived on, it was decided to create an internet application available to everyone (www.adamscountygis.com). No passwords are needed, no subscriptions are required and no fees are charged. Adams County also formulated a "good neighbor policy" which allows neighboring counties to post their GIS data on the Adams County GIS website free of charge.

The Great Flood of 1993

July of 1993 brought flooding to Adams County, which had never seen significant flooding before. Nearly 125 square miles were inundated with depths of up to 20 feet of water. Public entities claimed over \$9 million in damages to infrastructure, with an additional \$4.7 million in losses to individuals. Over 260 structures and residences were destroyed and an additional 400 were damaged.

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The IAFSM Current

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Fall 2009